

MODIFIED GOLF CLUB FACE FLEXURE CONTROL SYSTEM

ABSTRACT OF THE DISCLOSURE

A high impact golf club head with a face wall surrounded by a perimeter wall. After initial ball impact this face wall deflects and impacts a separate light weight open cellular structure that supports the face wall as it deflects and minimizes face wall failure.

Maximum ball exit speed from the club head is achieved from club face deflection near the maximum at which the face wall reaches its permanent elastic deformation. The face has a first modulus of elasticity determined by the face itself and after the face deflects a predetermined value, the face modulus is significantly increased by the cellular structure parallel to and closely spaced behind the face wall. The face wall impacts the cellular structure at a swing speed near the top of the swing speed range for that particular club.

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